



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,277	12/23/2005	Adam Twiss	MARKS16.001APC	1316
20995 7590 09/17/2009 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614				
EXAMINER				
MAL, KEVIN S				
ART UNIT		PAPER NUMBER		
2456				
NOTIFICATION DATE		DELIVERY MODE		
09/17/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary

Application No.

10/544,277

Applicant(s)

TWISS, ADAM

Examiner

KEVIN S. MAI

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 75-127 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 75-127 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 11/09/05, 9/11/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-74 and 128-148 have been canceled and claims 75-148 have been examined and are pending.

Claim Objections

2. Claim 91 is objected to because of the following informalities: Claim 91 is dependent on claim 74 which has been canceled. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 109 and 127 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 109 and 127 recite a carrier carrying control code. The carrier does not seem to be limited to tangible embodiments and as such is seen to include intangible embodiments such as signals. Signals alone are not considered statutory subject matter and as such claims 109 and 127 are directed toward non-statutory subject matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 75, 76, 78-80, 90-93, 95-97, 106-113, 116 and 124-127 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pub. No. 2002/0062375 to Teodosiu et al. (hereinafter "Teodosiu").

7. **As to Claim 75**, Teodosiu discloses a **method of reducing traffic in a decentralised peer-to-peer network, said peer-to-peer network operating over an underlying network comprising first and second network portions, the method comprising:**
routing a peer-to-peer message in one of said network portions with an intended destination in the other of said network portions to a gateway between peer-to-peer nodes residing on said first and second network portions (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server); **and**
controlling transport of said message at said gateway to limit propagation of said message into said other of said network portions (Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client).

8. **As to Claim 76**, Teodosiu discloses the invention as claimed as described in claim 75 **wherein said first network portion comprises a portion of said underlying network managed by a first entity and said second network portion comprises a portion of said underlying network connected to said first network portion across a boundary** (Paragraph

[0039] of Teodosiu discloses external network traffic is directed to the realm through gate server).

9. **As to Claim 78**, Teodosiu discloses the invention as claimed as described in claim 75 **wherein said transport controlling comprises blocking said message at said gateway** (Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. Wherein accessing the resource is seen to have blocked the message since the peer will not communicate beyond the gate).

10. **As to Claim 79**, Teodosiu discloses the invention as claimed as described in claim 75 **wherein said transport controlling comprises redirecting said message to a peer-to-peer node within said one of said network portions** (Paragraph [0097] of Teodosiu discloses if the requester is a compatible device the gate serve instructs the requester to use its own resource locator service).

11. **As to Claim 80**, Teodosiu discloses the invention as claimed as described in claim 75 **wherein said transport controlling comprises responding to said message from said gateway** (Paragraph [0098] of Teodosiu discloses if the requester is not a peer device in the realm the gate obtains the requested content and returns it to the requester).

12. **As to Claim 90**, Teodosiu discloses the invention as claimed as described in claim 75 **wherein said network portions comprise domains of an internet** (Paragraph [0043] of Teodosiu discloses peers include machines that connect through an ISP, accordingly the system is seen to utilize domains of an internet).

13. **As to Claim 91**, Teodosiu discloses a **method as claimed in claim 74 wherein said one of said network portions comprises said first network portion and said other of said network portions comprises said second network portion** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Wherein external traffic and the realm are seen to be indicative of the two portions).

14. **As to Claim 92**, Teodosiu discloses a **computer network message controller for reducing traffic in a decentralised peer-to-peer network, said peer-to-peer network operating over a physical network comprising first and second network portions, said network message controller comprising:**
a router for routing a peer-to-peer message in one of said first network portions with an intended destination in the other of said network portions to a gateway between peer-to-peer nodes residing on said first and second network portions (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server); **and**
a gateway controller configured to control transport of said message into said other of said network portions (Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow

the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client).

15. **As to Claim 93**, Teodosiu discloses a **computer network message controller as claimed in claim 92 wherein said first network portion comprises a portion of said physical network managed by a first entity and said second network portion comprises a portion of said physical network connected to said first network portion across a boundary** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server).

16. **As to Claim 95**, Teodosiu discloses a **computer network message controller as claimed in claim 92 wherein said gateway controller is configured to block said message at said gateway** (Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. Wherein accessing the resource is seen to have blocked the message since the peer will not communicate beyond the gate).

17. **As to Claim 96**, Teodosiu discloses a **computer network message controller as claimed in claim 92 wherein said gateway controller is configured to redirect said message to a peer-to-peer node within said one of said network portions** (Paragraph [0097] of

Teodosiu discloses if the requester is a compatible device the gate server instructs the requester to use its own resource locator service).

18. **As to Claim 97**, Teodosiu discloses a **computer network message controller as claimed in claim 92 wherein said gateway controller is configured to respond to said message** (Paragraph [0098] of Teodosiu discloses if the requester is not a peer device in the realm the gate obtains the requested content and returns it to the requester).

19. **As to Claim 106**, Teodosiu discloses a **computer network message controller as claimed in claim 92 wherein said one of said network portion comprises said first network portion and said other of said network portions and said other of said network portions comprises said second network portion** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Wherein external traffic and the realm are seen to be indicative of the two portions), **and wherein said router and said gateway controller comprise part of said first network portion** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Wherein the gate server is seen to be in the first network portion).

20. **As to Claim 107**, Teodosiu discloses a **computer network message controller as claimed in claim 92 wherein said one of said network portions comprises said first network portion and said other of said network portions comprises said second network portion**

Art Unit: 2152

(Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Wherein external traffic and the realm are seen to be indicative of the two portions).

21. **As to Claim 108**, Teodosiu discloses **a computer network message controller as claimed in claim 92 wherein said gateway controller comprises a processor, and program memory storing processor control code coupled to said processor to load and implement said code, said code comprising code to configure said gateway controller to operate as claimed in claim 92** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Paragraph [0039] discloses depending on whether the client device is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. Accordingly it is seen to have components necessary to perform the claim).

22. **As to Claim 109**, Teodosiu discloses **a carrier carrying the processor control code of claim 108** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Paragraph [0039] discloses depending on whether the client device is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. Accordingly it is seen to have components necessary to perform the claim).

23. **As to Claim 110**, Teodosiu discloses **a gateway controller, in particular for the computer network message controller of claim 92, for reducing traffic in a decentralised peer-to-peer network operating over an underlying network comprising first and second network portions, the controller being configured for operation at a gateway between peer-to-peer nodes residing on said first and second network portions, the gateway controller comprising:**

an interface for said first and second network portions, for receiving a peer-to-peer message in one of said first network portions with an intended destination in the other of said network portions (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server); **and**

a controller configured to control transport of said message into said other of said network portions (Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client).

24. **As to Claim 111**, Teodosiu discloses **a gateway controller as claimed in claim 110 wherein said controller is configured to block said message at said gateway** (Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client.

Wherein accessing the resource is seen to have blocked the message since the peer will not communicate beyond the gate).

25. **As to Claim 112**, Teodosiu discloses **a gateway controller as claimed in claim 110 wherein said controller is further configured to redirect a said message to a peer-to-peer node within said one of said network portions** (Paragraph [0097] of Teodosiu discloses if the requester is a compatible device the gate serve instructs the requester to use its own resource locator service).

26. **As to Claim 113**, Teodosiu discloses **a gateway controller as claimed in claim 110 wherein said controller is further configured to respond to a said message** (Paragraph [0098] of Teodosiu discloses if the requester is not a peer device in the realm the gate obtains the requested content and returns it to the requester).

27. **As to Claim 116**, Teodosiu discloses **gateway controller as claimed in claim 110 wherein said first and second network portions comprise physical portions of said underlying network** Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Wherein external traffic and the realm are seen to be indicative of the two portions.

28. **As to Claim 124**, Teodosiu discloses **a gateway controller as claimed in claim 110 wherein said one of said network portions comprises said first network portion and said**

other of said network portions comprises said second network portion (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Wherein external traffic and the realm are seen to be indicative of the two portions).

29. **As to Claim 125**, Teodosiu discloses a **gateway controller as claimed in claim 110 wherein said network portions comprise domains of an internet** (Paragraph [0043] of Teodosiu discloses peers include machines that connect through an ISP, accordingly the system is seen to utilize domains of an internet).

30. **As to Claim 126**, Teodosiu discloses a **gateway controller as claimed in claim 110 wherein said controller comprises a processor, and program memory storing processor control code coupled to said processor to load and implement said code, said code comprising code to configure said controller to control transport of said message into said other of said network portions** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server. Paragraph [0039] discloses depending on whether the client device is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. Accordingly it is seen to have components necessary to perform the claim).

31. **As to Claim 127**, Teodosiu discloses a **carrier carrying the processor control code of claim 126** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the

realm through gate server. Paragraph [0039] discloses depending on whether the client device is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. Accordingly it is seen to have components necessary to perform the claim).

Claim Rejections - 35 USC § 103

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

34. Claims 77, 81, 83, 94, 98, 100, 114, 117 and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teodosiu.

35. **As to Claim 77**, Teodosiu discloses the invention as claimed as described in claim 76. Teodosiu does not explicitly disclose **implemented to limit a number of peer-to-peer connections across said boundary to a permitted maximum.**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. As such it is seen that the gate server controls whether or not connections are made for example when it accesses resources on the behalf of the clients. Since this inherently limits the number of connections it would be obvious to apply a permitted maximum since the system already naturally limits connections.

36. **As to Claim 81**, Teodosiu discloses the invention as claimed as described in claim 80. Teodosiu does not explicitly disclose **wherein said message comprises a query, and wherein said responding comprises sending a response to said query comprising cached data derived from previous response to queries.**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0050] of Teodosiu discloses the RNS server creates a record for the resource, including the location of the publisher, and caches the record so that subsequent requests for the resource can be satisfied without communicating again with the publisher. Then paragraph [0044] discloses the gate server may perform similar functions as those performed by an RNS server. Accordingly it would have been obvious to implement the features of the RNS server with the gate server.

37. **As to Claim 83**, Teodosiu discloses the invention as claimed as described in claim 75. Teodosiu does not explicitly disclose **wherein said message comprises a file request message, and wherein said controlling comprises modifying a response to a previous file search request such that said response does not indicate that a requested file may be found in said other of said network portions.**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

38. **As to Claim 94**, Teodosiu discloses a **computer network message controller as claimed in claim 93**. Teodosiu does not explicitly disclose **wherein said gateway controller is configured to limit a number of peer-to-peer connections across said boundary to a permitted maximum.**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. As such it is seen that the gate server controls whether or not connections are made for example when it accesses resources on the behalf of the clients. Since this inherently limits the number of

connections it would be obvious to apply a permitted maximum since the system already naturally limits connections.

39. **As to Claim 98**, Teodosiu discloses a **computer network message controller as claimed in claim 97**. Teodosiu does not explicitly disclose **further comprising a cache to store data, wherein said message comprises a query, and wherein said gateway controller is configured to send a response to said query including data from said cache**.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0050] of Teodosiu discloses the RNS server creates a record for the resource, including the location of the publisher, and caches the record so that subsequent requests for the resource can be satisfied without communicating again with the publisher. Then paragraph [0044] discloses the gate server may perform similar functions as those performed by an RNS server. Accordingly it would have been obvious to implement the features of the RNS server with the gate server.

40. **As to Claim 100**, Teodosiu discloses a **computer network message controller as claimed in claim 92**. Teodosiu does not explicitly disclose **wherein said message comprises a file request message, and wherein said gateway controller is configured to modify a response to a previous file search request such that said response does not indicate that a requested file may be found in said other of said network portions**.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client.

Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

41. **As to Claim 114**, Teodosiu discloses **a gateway controller as claimed in claim 113**. Teodosiu does not explicitly disclose **comprising a query cache to store data derived from responses to queries, and wherein said controller is configured to respond to a said query using data from said query cache**.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0050] of Teodosiu discloses the RNS server creates a record for the resource, including the location of the publisher, and caches the record so that subsequent requests for the resource can be satisfied without communicating again with the publisher. Then paragraph [0044] discloses the gate server may perform similar functions as those performed by an RNS server. Accordingly it would have been obvious to implement the features of the RNS server with the gate server.

42. **As to Claim 117**, Teodosiu discloses **a gateway controller as claimed in claim 110**. Teodosiu does not explicitly disclose **wherein said message comprises a file request message, and wherein said controller is configured to modify a response to a previous file search request such that said response does not indicate that a requested file may be found in said other of said network portions**.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

43. **As to Claim 123**, Teodosiu discloses **a gateway controller as claimed in claim 110 wherein said first network portion comprises a portion of said underlying network managed by a first entity and said second network portion comprises a portion of said underlying network connected to said first network portion across a boundary** (Paragraph [0039] of Teodosiu discloses external network traffic is directed to the realm through gate server), **and** Teodosiu does not explicitly disclose **wherein said controller is configured to provide a limited number of peer-to-peer connections across said boundary**.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses depending on whether the client devices is compatible with the peers gate server may simply respond with the locations and allow the client device to directly access the resource or otherwise the gateway will access the resource on behalf of the client. As such it is seen that the gate server controls whether or not connections are made for example when it accesses resources on the behalf of the clients. Since this inherently limits the number of connections it would be obvious to apply a permitted maximum since the system already naturally limits connections.

44. Claims 82, 85, 99, 102, 115 and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teodosiu and further in view of US Pub. No. 2004/0148434 to Matsubara et al. (hereinafter "Matsubara").

45. **As to Claim 82**, Teodosiu discloses a method as claimed in claim 80. Teodosiu does not explicitly disclose **wherein said message comprises a file request, and wherein said responding comprises sending a response to said file request comprising previously cached data for a requested file.**

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 80 as disclosed by Teodosiu, with caching files as disclosed by Matsubara. One of ordinary skill in the art would have been motivated to combine to provide improved file access performance (paragraph [0062] of Matsubara.

46. **As to Claim 85**, Teodosiu discloses a method as claimed in claim 83. Teodosiu does not explicitly disclose **further comprising storing requested files in a cache, and wherein said response is modified to refer to said cache.**

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

47. **As to Claim 99, Teodosiu discloses a computer network message controller as claimed in claim 97. Teodosiu does not explicitly disclose wherein said message comprises a file request, further comprising a cache to store data derived from previous responses to file requests, and wherein said gateway controller is configured to send a response to said file request including data from said cache.**

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

48. **As to Claim 102, Teodosiu discloses a computer network message as claimed in claim 100. Teodosiu does not explicitly disclose further comprising a cache for storing requested files, and where said gateway controller is configured to modify said response to refer to said cache.**

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

49. **As to Claim 115**, Teodosiu discloses a **gateway controller as claimed in claim 113**. Teodosiu does not explicitly disclose **further comprising a file request cache to store data derived from responses to file requests, and wherein said controller is configured to respond to a said file request using data from said file request cache**.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

50. **As to Claim 119**, Teodosiu discloses a **gateway controller as claimed in claim 117**. Teodosiu does not explicitly disclose **further comprising a cache for storing requested files, and wherein said controller is configured to modify said response to refer to said cache**.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

51. Claims 84, 101 and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teodosiu and further in view of US Pub. No. 2002/0049760 to Scott et al. (hereinafter "Scott").

52. **As to Claim 84**, Teodosiu discloses a **method as claimed in claim 83**. Teodosiu does not explicitly disclose **wherein a said requested file is identified by a hash value**.

However, Scott discloses this. Paragraph [0008] of Scott discloses files in the peer-to-peer network may be identified or accessed based upon their associated hash ID values.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 83 as disclosed by Teodosiu, with using hash values as disclosed by Scott. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way. Paragraph [0045] of Teodosiu discloses uniquely identifying a resource and accordingly it would be obvious to use any method known for uniquely identifying resources.

53. **As to Claim 101**, Teodosiu discloses a **computer network message controller as claimed in claim 100**. Teodosiu does not explicitly disclose **wherein a said requested file is identified by a hash value**.

However, Scott discloses this. Paragraph [0008] of Scott discloses files in the peer-to-peer network may be identified or accessed based upon their associated hash ID values.

Examiner recites the same rationale to combine used in claim 84.

54. **As to Claim 118**, Teodosiu discloses a **gateway controller as claimed in claim 117**. Teodosiu does not explicitly disclose **wherein a said requested file is identified by a hash value**.

However, Scott discloses this. Paragraph [0008] of Scott discloses files in the peer-to-peer network may be identified or accessed based upon their associated hash ID values.

Examiner recites the same rationale to combine used in claim 84.

55. Claims 86, 87, 103 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teodosiu and further in view of US Pub. No. 2002/0194108 to Kitze (hereinafter “Kitze”).

56. **As to Claim 86**, Teodosiu discloses **a method as claimed in claim 83**. Teodosiu does not explicitly disclose **wherein said underlying network comprises a third network portion, and wherein said modifying comprises modifying said response to indicate that said requested file is obtainable from a peer-to-peer node located on said third network portion**.

However, Kitze discloses this. Paragraph [0037] of Kitze discloses the server offers delivery of the file up for bidding. Paragraph [0039] discloses nodes may respond by placing a bid to transport the file. Paragraph [0042] discloses the submitter of the winning bid is notified and provided with the information necessary to transport the file across the network. Accordingly it is seen that this file would then be received from the winning bidder whom could exist in any of the areas discloses in Figure 1A.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 83 as disclosed by Teodosiu, with receiving data from another network portion as disclosed by Kitze. One of ordinary skill in the art would have been motivated to combine optimizing network traffic by taking advantage of unused network bandwidth (paragraph [0009]).

57. **As to Claim 87**, Teodosiu discloses a **method as claimed in claim 75**. Teodosiu does not explicitly disclose **wherein said physical network comprises a third network portion, wherein use of each of said network portions has an associated cost, wherein data transport over said third network portion has a cost less than a cost associated with said other of said network portions, and wherein said controlling comprises directing said message into said third network portion.**

However, Kitze discloses this. Paragraph [0037] of Kitze discloses the server offers delivery of the file up for bidding. Paragraph [0039] discloses nodes may respond by placing a bid to transport the file. Paragraph [0042] discloses the submitter of the winning bid is notified and provided with the information necessary to transport the file across the network. Accordingly it is seen that this file would then be received from the winning bidder whom could exist in any of the areas discloses in Figure 1A.

Examiner recites the same rationale to combine used in claim 86.

58. **As to Claim 103**, Teodosiu discloses a **computer network message as claimed in claim 92**. Teodosiu does not explicitly disclose **wherein said underlying network comprises a third network portion, and wherein said gateway controller is configured to modify said response to indicate that said requested file is obtainable from a peer-to-peer node located on said third network portion.**

However, Kitze discloses this. Paragraph [0037] of Kitze discloses the server offers delivery of the file up for bidding. Paragraph [0039] discloses nodes may respond by placing a

bid to transport the file. Paragraph [0042] discloses the submitter of the winning bid is notified and provided with the information necessary to transport the file across the network. Accordingly it is seen that this file would then be received from the winning bidder whom could exist in any of the areas discloses in Figure 1A.

Examiner recites the same rationale to combine used in claim 86

59. **As to Claim 120, Teodosiu discloses a gateway controller as claimed in claim 110. Teodosiu does not explicitly disclose wherein said underlying network comprises a third network portion, and wherein said controller is configured to modify said response to indicate said requested file is obtainable from a peer-to-peer node located on said third network portion.**

However, Kitzé discloses this. Paragraph [0037] of Kitzé discloses the server offers delivery of the file up for bidding. Paragraph [0039] discloses nodes may respond by placing a bid to transport the file. Paragraph [0042] discloses the submitter of the winning bid is notified and provided with the information necessary to transport the file across the network. Accordingly it is seen that this file would then be received from the winning bidder whom could exist in any of the areas discloses in Figure 1A.

Examiner recites the same rationale to combine used in claim 86

60. Claims 88, 89, 104, 105, 121 and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teodosiu and further in view of US Pub. No. 2004/0088646 to Yeager et al. (hereinafter "Yeager").

61. **As to Claim 88**, Teodosiu discloses a **method as claimed in claim 75**. Teodosiu does not explicitly disclose **wherein a said peer-to-peer message has a message identifier, and wherein said controlling comprises:**
storing said message identifier for said message,
monitoring message identifiers of messages passing through said gateway, and
limiting propagation of said identified message such that said message passes between said first and second network portions no more than a permitted maximum number of times.

However, Yeager discloses this. Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 75 as disclosed by Teodosiu, with limiting message propagation as disclosed by Yeager. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way. Yeager and Teodosiu are directed toward peer-to-peer systems and as such it would be obvious to utilize features disclosed to be known in one peer-to-peer system in another peer-to-peer system.

62. **As to Claim 89**, Teodosiu-Yeager discloses **a method as claimed in claim 88 wherein said permitted maximum number of times is one** (Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded).

Examiner recites the same rationale to combine used in claim 88.

63. **As to Claim 104**, Teodosiu discloses **a computer network message controller as claimed in claim 92**. Teodosiu does not explicitly disclose **wherein a said peer-to-peer message has a message identifier, and wherein said gateway controller is configured to store said message identifier for said message, monitor message identifiers of messages passing through said gateway, and limit propagation of said identified message such that said message passes between said first and second network portions no more than a permitted maximum number of times**.

However, Yeager discloses this. Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded.

Examiner recites the same rationale to combine used in claim 88.

64. **As to Claim 105**, Teodosiu-Yeager discloses a **computer network message controller as claimed in claim 104 wherein said permitted maximum number of times is one** (Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded).

Examiner recites the same rationale to combine used in claim 88.

65. **As to Claim 121**, Teodosiu discloses a **gateway controller as claimed in claim 110**. Teodosiu does not explicitly disclose **wherein a said peer-to-peer message has a message identifier, and wherein said controller is configured to store said message identifier for said message, monitor message identifiers of messages passing through said gateway, and limit propagation of said identified message such that said message passes between said first and second network portions no more than a permitted maximum number of times**.

However, Yeager discloses this. Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded.

Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded.

Examiner recites the same rationale to combine used in claim 88.

66. **As to Claim 122**, Teodosiu-Yeager discloses a **gateway controller as claimed in claim 121 wherein said permitted maximum number of times is one** (Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded).

Examiner recites the same rationale to combine used in claim 88.

Conclusion

67. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 20060168304 A1 - Network traffic control in peer-to-peer environments to Bauer; Daniel N. et al.

US 20070097885 A1 - Peer-to-Peer Communication Pipes to Traversat; Bernard A. et al.

US 20090182842 A1 - Method And System For Redirecting Data Requests In Peer-To-Peer Data Networks to Dutta; Rabindranath et al.

US 20090106355 A1 - Method and Apparatus for Peer-to-Peer Services to Harrow; Ivan P. et al.

US 20070192474 A1 - Personalized Content Delivery Using Peer-To-Peer Precaching to Decasper; Dan et al.

US 20050149481 A1 - Managed peer-to-peer applications, systems and methods for distributed data access and storage to Hesselink, Lambertus et al.

US 7062555 B1 - System and method for automatic selection of service provider for efficient use of bandwidth and resources in a peer-to-peer network environment to Kouznetsov; Victor et al.

US 20020010866 A1 - Method and apparatus for improving peer-to-peer bandwidth between remote networks by combining multiple connections which use arbitrary data paths to McCullough, David J. et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN S. MAI whose telephone number is (571)270-5001. The examiner can normally be reached on Monday through Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. S. M./
Examiner, Art Unit 2456

/Bunjod Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2456